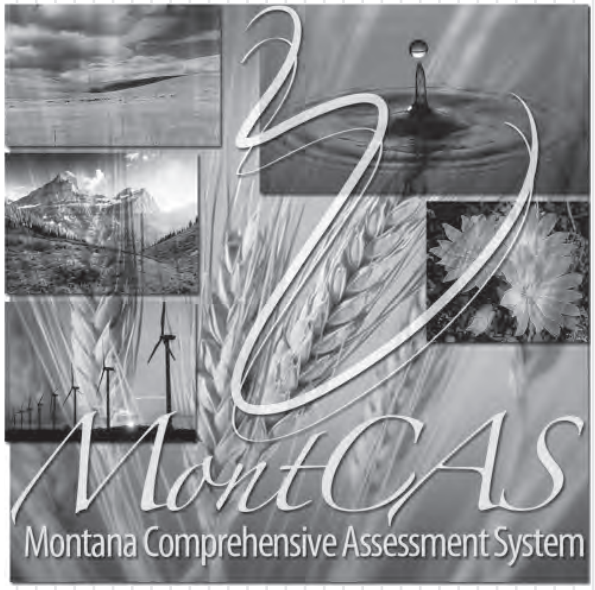
Montana Comprehensive As sess ment System (MontCAS CRT)

Grade 4
Common Released Items
Spring 2010



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Montana
Office of Public Instruction
Denise Juneau, State Superintendent

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Reading Directions for Spring CRT

This Reading test contains three test sessions. Mark or write y our ans wers in the Answer Booklet. Use a pencil to mark or write y our ans wers.

This test includes tw o types of questions: multiple-choice and constr ucted-response questions.

For the multiple-choice questions, y ou will be gi ven four ans wer choices—A, B , C, and D . You are to choose the cor rect ans wer from the four choices. Each question has onl y one ans wer. After y ou have chosen the cor rect ans wer to a question, fi nd the question number in y our Answer Booklet and completel y fi ll in the circle for the ans wer y ou chose. Be sure the question number in the Answer Booklet matches the question number in the Test Booklet. The e xample belo w sho ws ho w to completely fi ll in the circle.

CORRECT MARK	INCORRECT MARKS
●	❍ ⊙ ◘ ⊘

If y ou decide to change y our ans wer to a question, erase the wrong mark completel y before fi lling in the circle of the ne w ans wer. Be sure y ou ha ve onl y one ans wer mark ed for each question. **If tw o circles ar e b ubbled in f or the same question, that question will be scor ed as incorr ect.**

If y ou are ha ving diffi culty ans wering a question, skip the question and come back to it later . Mak e sure y ou skip the circle for the question in y our Answer Booklet.

For the other types of questions in the Test Booklet, y ou will be ask ed to write y our ans wers in the box pro vided. Read the question carefull y. If a question asks y ou to e xplain y our ans wer or to sho w your w ork, be sure to do so.

You ma y mak e notes or use highlighters in y our Test Booklet, but y ou must bubb le or write y our fi nal answers in y our Answer Booklet. **Do not mak e an y str ay or unnecessary mar ks in y our Answer Booklet.**

Let's w ork through a sample question to gether to be sure y ou understand the directions.

Sample Question

1. What is the capital of Montana?
   A. Browning
   B. Glendive
   C. Helena
   D. Missoula

Reading

In this passage, younger sister Nishiime tells about the climb she takes with her sister up Coyote Hill. Read the passage, then answer the questions that follow.

SkySisters

by Jan Bourdeau Waboose

The Anishinawbe Ojibway words in the story are: *Nishiime*, which means "younger sister" and is pronounced *Ni-shee-may*; and *Nimise*, which means "older sister" and is pronounced *Ni-mi-say*.

The dark arms of the balsam trees are heavy with snow. They reach out to touch us as we walk on.

Something stirs in the shadows beneath
2 the branches.

"Nishiime, don't move." Nimise speaks low. "You'll scare it away."

She stops and points at a fluffy, white rabbit. But I see something bigger bounding
4 toward us. It is moving quickly. I try to tell my sister, but the words will not come. I tug on her arm and point.

"What is it?" she asks, yet she does not look away from the rabbit.

It is too late to warn her. The huge shape is right in front of us. My sister whirls around, gasps, and holds on to my arm. I suck in my breath and hold her arm. We stand motionless as we stare into the eyes of a deer.

The deer looks at us and does not move away. With strong legs, she paws at the snow before us. She waits a moment, then turns and runs gracefully toward the river.

We stare after the deer for a long time before Nimise whispers. "A white-tailed deer, nothing to be afraid of." Sister lets go of my arm.

"I know." I whisper too. "I wasn't afraid." I let go of her arm and smile. She smiles back.

We hold hands and run toward Coyote Hill. The closer we get, the more it looks like a big white bear.

When we reach the hill, Nimise says, "It's steep. Let me pull you up."

It is not that steep, but I like my big sister pulling me up. I pretend she is a team of huskies as she climbs higher, with me in tow.

"Faster. Faster." I try to call out gently, and I begin to giggle.

Nimise stops and says, "It's your turn to pull me."

"No it's not. It's my turn to be the leader, though. Follow me," I shout. I run past her as fast as I can to the top of the hill.

"Nishiime, whisper when you speak." Sister's words chase behind me.

We can see our north country for miles from Coyote Hill. The wind is strong up here. Icy fingers pull at my warm green parka. A snow cloud hides Grandmother Moon and delicate snowflakes begin to sprinkle down to us.

My sister opens her arms and reaches for the sky, trying to gather as many flakes as she can. I too reach my arms to the sky to gather my share.

1. What is the **main** purpose of the first paragraph?
   A. to describe the setting
   B. to introduce the characters
   C. to describe the lesson
   D. to introduce the problem

2. In the first paragraph, what are the "dark arms"?
   A. the long shadows
   B. the movement of animals
   C. the darkness of night
   D. the tree branches

3. Which words from the beginning of the passage make the balsam trees seem like people?
   A. "heavy with snow"
   B. "reach out to touch us"
   C. "as we walk on"
   D. "beneath the branches"

4. In paragraph 2, "Something stirs in the shadows beneath the branches. " In this paragraph, to stir means to
   A. grow.
   B. move.
   C. sit.
   D. watch.

5. In paragraph 4, Nimise sees "something bigger bounding toward us. It is moving quickly." Which word in these sentences **best** helps the reader understand the meaning of the word bounding?

   A. something
   B. bigger
   C. toward
   D. moving

6. In paragraph 4, why does Nishiime tug on her sister's arm and point?

   A. She is surprised to see the dark shadows of the trees.
   B. She is afraid of what is coming toward them.
   C. She is excited to see a small, white rabbit.
   D. She is certain that they are almost back home.

7. As the sisters reach the top of the hill, Nishiime is **most likely** told to talk softly so she does not

   A. interrupt Nimise.
   B. forget her way.
   C. run out of breath.
   D. disturb nature.

Read this passage about the "greatest electrician in the world." Then answer the questions that follow.

Granville T. Woods

"The Greatest Electrician in the World"

by Wade Hudson

Granville T. Woods was born April 23, 1856. He left school when he was ten years old and worked in a machine shop. After that, he had many different jobs. He was a fireman with a railroad company in Missouri. It was his job to shovel coal into the firebox of the train. He worked in a steel mill in Springfield, Ohio.

In New York City, Granville found a job in a machine shop. He went to school at night to learn about electricity.

When Granville was 22 years old, he worked on a British steamship called *Ironsides*. For two years, he visited many parts of the world. Then he returned to the United States and settled in Cincinnati, Ohio.

In 1884, Granville T. Woods began his career as one of America's most talented inventors. His first invention helped steam boiler furnaces heat homes and buildings better. Later that year, Granville invented a new telephone transmitter. It could send sounds over a longer distance than the old transmitters. The sounds were much clearer and louder, too.

Granville kept working. In 1885, he invented a wonderful new thing. With Granville's new invention, a person could send a message by *speaking* near telegraph keys. The person on the other end could hear the message just like from a telephone. The American Bell Telephone Company bought the patent from Granville.

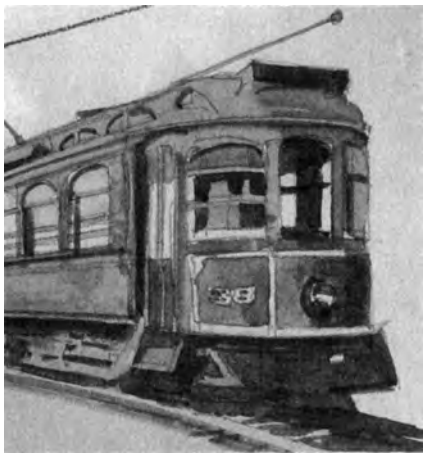
Then there was the "amusement apparatus." This was a special set of tracks for motor cars to run on. Because of Granville's new invention, many new rides were set up at amusement parks.

Granville invented an incubator, too. An incubator is a box that helps to keep eggs warm enough to hatch. Today, some incubators can hatch as many as 100,000 baby chicks at once.

One of Granville's most important inventions was railway telegraphy. Engineers and conductors on moving trains used it to talk to one another. Station operators could also talk to operators on moving trains. They could tell each other if there was a problem on the train. And they could stop accidents from happening.

In 1888, Granville invented an overhead electric system to run trains. A pole from the train was attached to an electric line running overhead. The electric line gave the power to make the trains go. Many cities replaced the

"old" steam-engine trains with trains operated by Granville's new system.



Trolleys in Boston and San Francisco use Granville's overhead electric system instead of steam-run engines.

Another of Granville's important inventions was a safety device called the "third rail." The "third rail" runs alongside of the two tracks on which a train runs. The "third rail" provides the power to make the train go. The "third rail" is still used today to help run subway trains in New York City and many other cities.

By 1890, Granville Woods had received 22 patents for his inventions. But Granville had to face many difficulties during his career. He went to court twice to protect his right to the railway telegraph system he invented.

Thomas Edison had been working on a similar system. The Edison Company said Edison had invented the railway telegraph system first. Granville proved he was the original inventor. But he had to spend almost all of his money to do it.

Thomas Edison offered Granville a job with his company. But Granville did not accept. He wanted to be his own boss.

Very few have done more in the field of electricity and railway safety than Granville T. Woods. Yet most people do not know his name. Many of Granville's patents were sold to large companies such as General Electric, Westinghouse, and American Bell Telephone.

Granville T. Woods died in 1910. In 1969, a school in Brooklyn, New York, was named for this great inventor. On October 11, 1974, the governor of Ohio issued a proclamation to recognize Granville T. Woods as the "greatest electrician in the world."

8. How did Granville learn about electricity?

   A. in school at night
   B. from Thomas Edison
   C. in a steel mill
   D. from his travels

9. Granville became an inventor after he moved to

   A. Brooklyn, New York.
   B. Cincinnati, Ohio.
   C. New York City.
   D. Springfield, Ohio.

10. Why was Granville's first invention important?

   A. It kept eggs warm enough to hatch.
   B. It increased electric power to run trains.
   C. It helped steam boiler furnaces heat homes better.
   D. It improved how telephone messages were sent.

11. Which statement from the passage is an **opinion**?

   A. "Granville T. Woods was born April 23, 1856."
   B. "He worked in a steel mill in Springfield, Ohio."
   C. "For two years, he visited many parts of the world."
   D. "In 1885, he invented a wonderful new thing."

12. Why did Granville go to court twice?

   A. to receive patents for his inventions
   B. to try to sell his inventions
   C. to protect his right as an inventor
   D. to find a partner to work with

13. Why did the Edison Company **most likely** say Thomas Edison invented the railway telegraph system first?

   A. Granville could not prove he was the original inventor.
   B. Granville invented his system years after Edison invented his.
   C. Edison had been working on a system like Granville's.
   D. Edison spent more money than Granville inventing his system.

14. What is the **main** purpose of the second picture?

A. to show Granville's overhead electric train system
B. to suggest that Granville may have invented the trolley
C. to show how trolleys looked when they ran on steam
D. to prove that the first trolleys were used in Boston and San Francisco

Use the dictionary entry below to answer question 15.

field *n* **1.** land for sports: *We played on the football field.* **2.** open land: *We passed a large field of grass.* **3.** one's job: *She works in the field of medicine.* **4.** a group: *The voters chose from a field of four candidates.*

15. Which meaning of the word <u>field</u> is used in paragraph 14?

A. meaning 1
B. meaning 2
C. meaning 3
D. meaning 4

16. Why are Granville's inventions considered important?

A. His inventions earned him a lot of money.
B. His inventions came about through hard work.
C. His inventions improved the lives of people.
D. His inventions were sold to large companies.

17. Why is this passage an example of a biography?

A. It tells about the life of a real person.
B. It provides information about inventions.
C. It explains events that happened long ago.
D. It tries to persuade readers with facts.

18. Which book would **most likely** contain information about other inventors who lived during Granville's time?

A. *Bell Telephone: 1876*
B. *Railroads in the 1800s*
C. *Inventions: 1800–1950*
D. *Folktales of the 1800s*

19. How is the information in this passage **mostly** organized?

A. in order of importance
B. in the order events happened
C. from problems to solutions
D. from main idea to supporting details

20. Why was Granville a great American inventor? Use information from the passage to support your answer.

Scoring Guide

Score	Description
4	Response provides a thorough explanation of why Granville was a great American inventor. Explanation includes specific, relevant details from the passage.
3	Response provides an explanation of why Granville was a great American inventor. Explanation includes supporting details from the passage, but lacks specificity, relevance, and/or development.
2	Response provides a partial explanation of why Granville was a great American inventor. Explanation includes limited details from the passage and/or is partially correct.
1	Response makes a vague or minimal statement of why Granville was a great American inventor.
0	Response is totally incorrect or irrelevant.
Blank	No response.

Scoring Notes

A thorough explanation of why Granville was a great American inventor will include the fact that his inventions helped Americans lead better lives.

Details from the passage can include, but are not limited to:

- His first invention helped steam boiler furnaces heat homes and buildings better.
- His new telephone transmitter sent clearer and louder sounds over a longer distance.
- His 1885 invention allowed a telegraph to work like a telephone.
- He developed an "amusement apparatus," which was a set of tracks for motor cars to run on; this led to the development of new rides at amusement parks.
- He invented the incubator.
- He developed a railway telegraphy system that allowed railway workers to speak with one another, alerting each other to problems and in turn preventing accidents.
- He devised an overhead electric line that gave power to run trains.
- He devised the "third rail," which provides power for trains.

Example of Scor e Point 4

Granvill was a great American inventor because he inventes many usuful things. Granvills first invention was a furnace that helped heat homes & buildings. He also invented a new telephone transmitter that could send sounds over a longer distance. He also invented a voice messaae system. Then came the "amusement apparatus." It was a special set of tracks for motor cars to run on. Granvill also invented an incubator that's a box that helps keep eggs warm enough to hatch. Another one of Granvill's inventions was railway telegraphy. In 1888, he invented an overhead electric system to run trains. Another one of his was the "third rail." That is his many inventions & why he's a great inventor.

Example of Scor e Point 3

Granville became a great American because he invented many things we use today. I'll give you three exsaples. His first one helped Steam boiler formaces heat homes and builing's. Anothen one he invented was the new transmitter for phones exsept this one would go longer. The last one I'm going to tell you about is the incobator. The incubator heled chickens batch eggs faster because of the heat coming from the incubator. That's why Granville is a great ameican inventor.

Example of Scor e Point 2
Sample 1

Granville was a great American inventor because he invented many helpfuli, great inventions, such as an incubator, a special set of tracks for motor cars to ride on, an electric line for trains to run on in big cities like New York and many more.

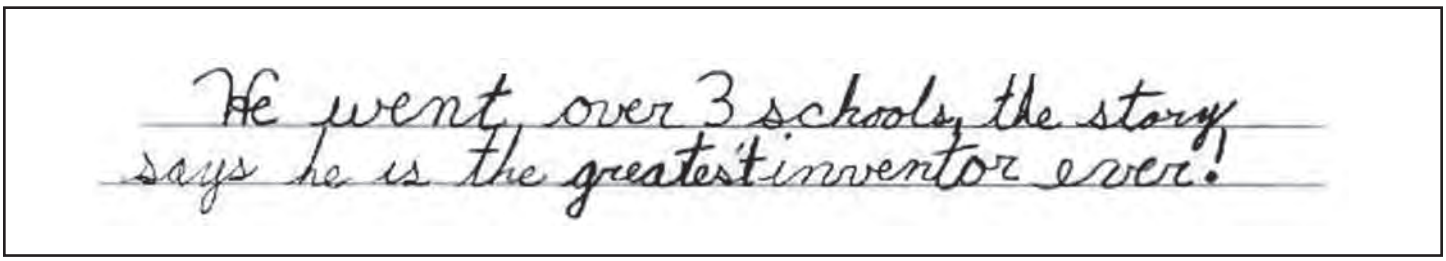
Example of Scor e Point 2
Sample 2

Granduille was a great American inventor for many reasons. First he was born in 1856 and he invented machines that are still used today. Granville was great at working with electricity. Secand, Granduille worked very hard at venting. He invented over seven different things. Third, Granduille worked and didn't give up. He also wanted to work by himself without any help. Granduille was a great American inventer!

Example of Scor e Point 1

He invented many great things that we use today and his inventions helped to keep many accidents from happening.

Example of Scor e Point 0



Read this passage about the eagles that come to Glacier National Park in Montana each year. Then answer the questions that follow.

The Mighty Eagle

by Dorothy Hinshaw Patent

With its shining white head and tail and brownish black body, the large and powerful adult bald eagle cannot be mistaken for any other bird. Its wingspan can reach seven and a half feet, and its body may measure more than three feet from head to tail. The bald eagle is a superb hunter, swooping down from the skies to capture its prey on the wing.

The eagle is perfectly adapted for the hunting life. Its feet are equipped with sharp, curved talons an inch and a half long, for grasping its prey. Tiny spikes on the bottoms of its toes help grip slippery prey, such as fish. Its powerful hooked beak, which is used to tear apart food, is two inches long.

sharp talons

hooked beak

The golden eagle also lives in America. The adult golden eagle is dark brown, while young ones usually have some white on the wings and a white tail with a dark band at its tip. Bald eagles have bare legs, but the legs of golden eagles are feathered.

Eagles, along with their close relatives, the hawks, probably have the sharpest vision in the animal world. They can see a small animal, such as a rabbit or mouse, moving in the grass from a mile away. Hawks and eagles have eyes that face forward, like ours. Each eye has a slightly different field of vision, which gives the bird very good depth perception. Like us, it can judge distances very well. This is important to a hunter, which must know just when to pounce on its prey.

The two American eagles eat different food. Golden eagles hunt rabbits and large rodents like ground squirrels and prairie dogs. Bald eagles feed mostly on fish, but scientists have found that many bald eagles feed heavily on jackrabbits during the winter and will eat other food, such as dead ducks, when it is available. They have learned other interesting things about bald eagles, too.

Birds are tricky to keep track of, for flight allows them to travel quickly from place to place. A favorite way to trace individual birds is for scientists to put some sort of label on them. Lightweight, brightly colored plastic tags are often used to identify individual birds. Each eagle has its own number so that the bird can be identified whenever it is seen. But tags don't help find the bird once it has flown away. In order to track large birds like eagles, radio transmitters can be attached to them. The transmitter gives out a signal that can be picked up by a receiver. Radio transmitters allow scientists to find and follow the movements of individual birds.

6

But how do you capture an eagle in order to attach a transmitter to it? Most of the time this would be a very difficult problem. Bald eagles are scarce and hard to catch. But each fall, for about six to ten weeks, hundreds of bald eagles gather in Glacier National Park in Montana to feed on salmon in McDonald Creek. Here, with so many hungry eagles concentrated in one place, scientists can capture them, attach radio transmitters and wing tags, and let them go. Then the birds can be tracked for the rest of the year, long after they have left the park.

7

21. In the first paragraph, why does the author **most likely** give information about the size and color of the bald eagle?

A. to persuade readers to protect bald eagles
B. to ask what readers know about bald eagles
C. to entertain with a story about bald eagles
D. to describe the special qualities of bald eagles

22. In the first paragraph, the phrase "on the wing" **most likely** means

A. while eating.
B. while growing.
C. while moving.
D. while watching.

23. Golden eagles are **different** from bald eagles because golden eagles have

A. light coloring.
B. feathered legs.
C. a large wingspan.
D. a pointed beak.

24. How are scientists able to keep track of individual bald eagles?

A. by capturing them
B. by naming them
C. by tagging them
D. by watching them

25. Paragraphs 6 and 7 **mainly** explain how bald eagles

A. hunt for food.
B. are similar to hawks.
C. change as they grow.
D. are studied by scientists.

26. What is the **main** purpose of the passage?

A. to show where eagles build nests
B. to explain why people like eagles
C. to provide general facts about eagles
D. to persuade scientists to study eagles

27. Where would information about eagles **most likely** be found?

A. in an encyclopedia
B. on a map of Glacier National Park
C. in a magazine about hunting
D. on an Internet Web site about scientists

Mathematics Directions for Spring CRT

This Mathematics test contains three test sessions. Mark or write y our ans wers in the Answer Booklet. Use a pencil to mark or write y our ans wers.

This test includes three types of questions: multiple-choice, shor t-answer, and constr ucted-response questions.

For the multiple-choice questions, y ou will be gi ven four ans wer choices—A, B , C, and D . You are to choose the cor rect ans wer from the four choices. Each question has onl y one ans wer. After y ou have chosen the cor rect ans wer to a question, fi nd the question number in y our Answer Booklet and completel y fi ll in the circle for the ans wer y ou chose. Be sure the question number in the Answer Booklet matches the question number in the Test Booklet. The e xample belo w sho ws ho w to completely fi ll in the circle.

CORRECT MARK	INCORRECT MARKS
●	❍ ⊙ ◘ ⊘

If y ou decide to change y our ans wer to a question, erase the wrong mark completel y before fi lling in the circle of the ne w ans wer. Be sure y ou ha ve onl y one ans wer mark ed for each question. **If tw o circles ar e b ubbled in f or the same question, that question will be scor ed as incorr ect.**

If y ou are ha ving diffi culty ans wering a question, skip the question and come back to it later . Mak e sure y ou skip the circle for the question in y our Answer Booklet.

For the other types of questions in the Test Booklet, y ou will be ask ed to write y our ans wers in the box pro vided. Read the question carefull y. If a question asks y ou to e xplain y our ans wer or to sho w your w ork, be sure to do so.

You ma y mak e notes or use highlighters in y our Test Booklet, but y ou must bubb le or write y our fi nal answers in y our Answer Booklet. **Do not mak e an y str ay or unnecessary mar ks in y our Answer Booklet.**

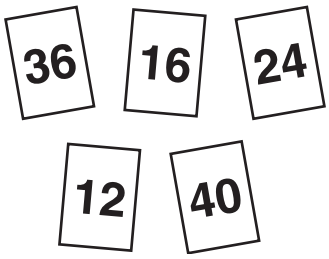
Let's w ork through a sample question to gether to be sure y ou understand the directions.

Sample Question

1. What is the capital of Montana?
   A. Browning
   B. Glendive
   C. Helena
   D. Missoula

Mathematics (No Calculator)

1. Randy put the number cards sho wn belo w on his desk.



These numbers are all multiples of w hich number?

A. 3
B. 4
C. 6
D. 8

2. The calendar belo w sho ws the dates of different e vents at Meado wlark P ark.

July						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15 Summer concert	16	17	18
19	20	21	22	23	24 Fireworks	25
26	27	28	29	30	31	

Mrs. Webster is planning a nature w alk for one w eek before the summer concer t. On w hat date is she planning the nature walk?

A. July 8
B. July 14
C. July 16
D. July 22

3. The table below shows the number of cans three grades collected.

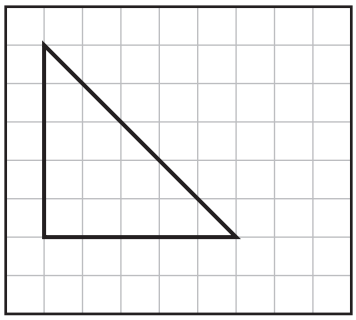
Cans Collected

Grade	Number of Cans
Third	210
Fourth	789
Fifth	491

Which is the **best** estimate for the total number of cans these three grades collected?

A. 1300
B. 1400
C. 1500
D. 1600

4. Laura drew a shape on the grid shown below.



Key

☐ stands for 1 square unit

What is the area of the shape?

A. 12 square units
B. $12\frac{1}{2}$ square units
C. 15 square units
D. $15\frac{1}{2}$ square units

5. Deb had the stamps sho wn belo w.

Deb used $\frac{3}{5}$ of these stamps to mail postcards to friends and $\frac{1}{5}$ of them to mail a postcard to a teacher . What fraction of these stamps did she use?

A. $\frac{2}{10}$

B. $\frac{2}{5}$

C. $\frac{4}{10}$

D. $\frac{4}{5}$

6. Cheryl is taking a sur vey to fi nd out which spor ts her friends pla y. Which question should Cher yl ask her friends?

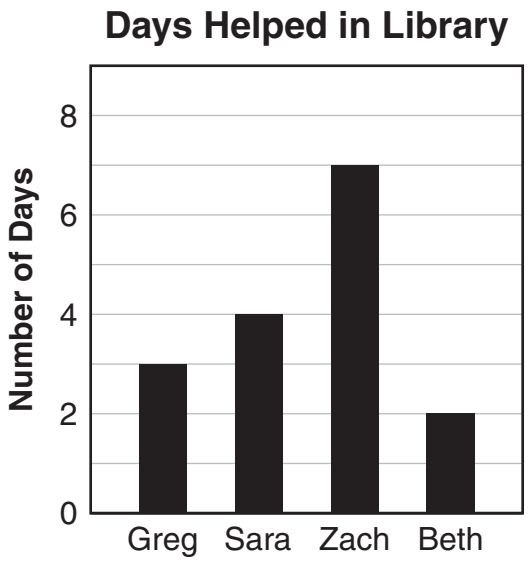
A. What is y our f avorite spor t?

B. Do y ou lik e to pla y spor ts?

C. What spor ts do y ou pla y?

D. How man y spor ts do y ou pla y?

7. The bar g raph belo w sho ws the number of days some students helped in the librar y.



Who helped in the librar y for 4 or more da ys?

A. only Sara

B. only Zach

C. Sara and Zach

D. Greg, Sara, and Beth

8. Mr. Mar tin put 63 books on 7 shelv es. He put the same number of books on each shelf. Which number sentence sho ws how man y books Mr . Mar tin put on each shelf?

A. $63 \div 7 = \square$

B. $63 + 7 = \square$

C. $63 \times 7 = \square$

D. $63 - 7 = \square$

9. A party store sells balloons in bags of 30. Which chart shows the **total** number of balloons in different numbers of bags?

A.

Number of Bags	2	3	4	5
Total Number of Balloons	60	90	110	140

B.

Number of Bags	2	3	4	5
Total Number of Balloons	30	30	30	30

C.

Number of Bags	2	3	4	5
Total Number of Balloons	60	90	120	150

D.

Number of Bags	2	3	4	5
Total Number of Balloons	30	60	90	120

10. Multiply:

$$\begin{array}{r} 291 \\ \times \quad 30 \\ \hline \end{array}$$

11. Kenny made the table below to show the number of pennies three grades collected.

Pennies Collected

Grade	Number of Pennies
Second	2,053
Third	1,180
Fourth	1,956

a. How many pennies did the three grades collect in all? Show your work or explain how you found your answer.

The three grades need to collect 10,000 pennies altogether.

b. How many more pennies do the three grades need to collect? Show your work or explain how you found your answer.

Kenny wrote the number sentence shown below to solve a word problem about the number of pennies some of the grades collected.

$$2{,}053 - 1{,}956 = \square$$

c. Based on Kenny's number sentence, write the word problem he was trying to solve.

Scoring Guide

Score	Description
4	5 points
3	4 points
2	3 points
1	1–2 points
0	Response is incorrect or contains some correct work that is irrevelant to the skill or concept being measured.
Blank	No response.

Scoring Notes

Part a: 2 points correct answer, **5,189**, with appropriate work shown or explanation given
OR
1 point correct answer without appropriate work shown or explanation given
or
correct strategy with incorrect or missing answer

Part b: 2 points correct answer, **4,811**, with appropriate work shown or explanation given
or
correct answer based on an incorrect answer in part a
OR
1 point correct answer without appropriate work shown or explanation given
or
correct strategy with incorrect or missing answer

Part c: 1 point writes an appropriate question

Sample Responses:

a: 2,053 + 1,180 + 1,956 = 5,189

b. 10,000 – 5,189 = 4,811

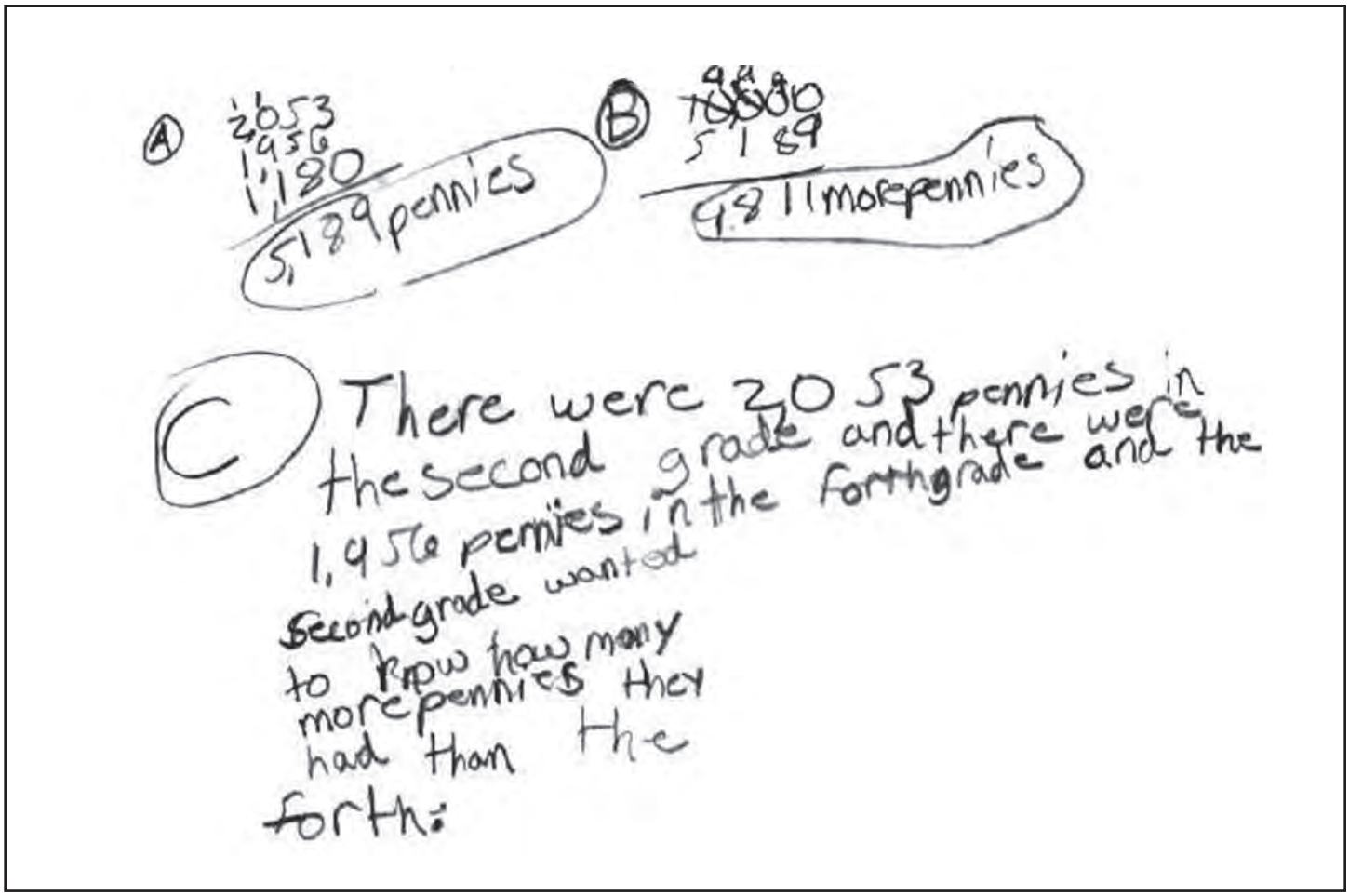
c. How many more pennies did the second grade collect than the fourth grade?

or

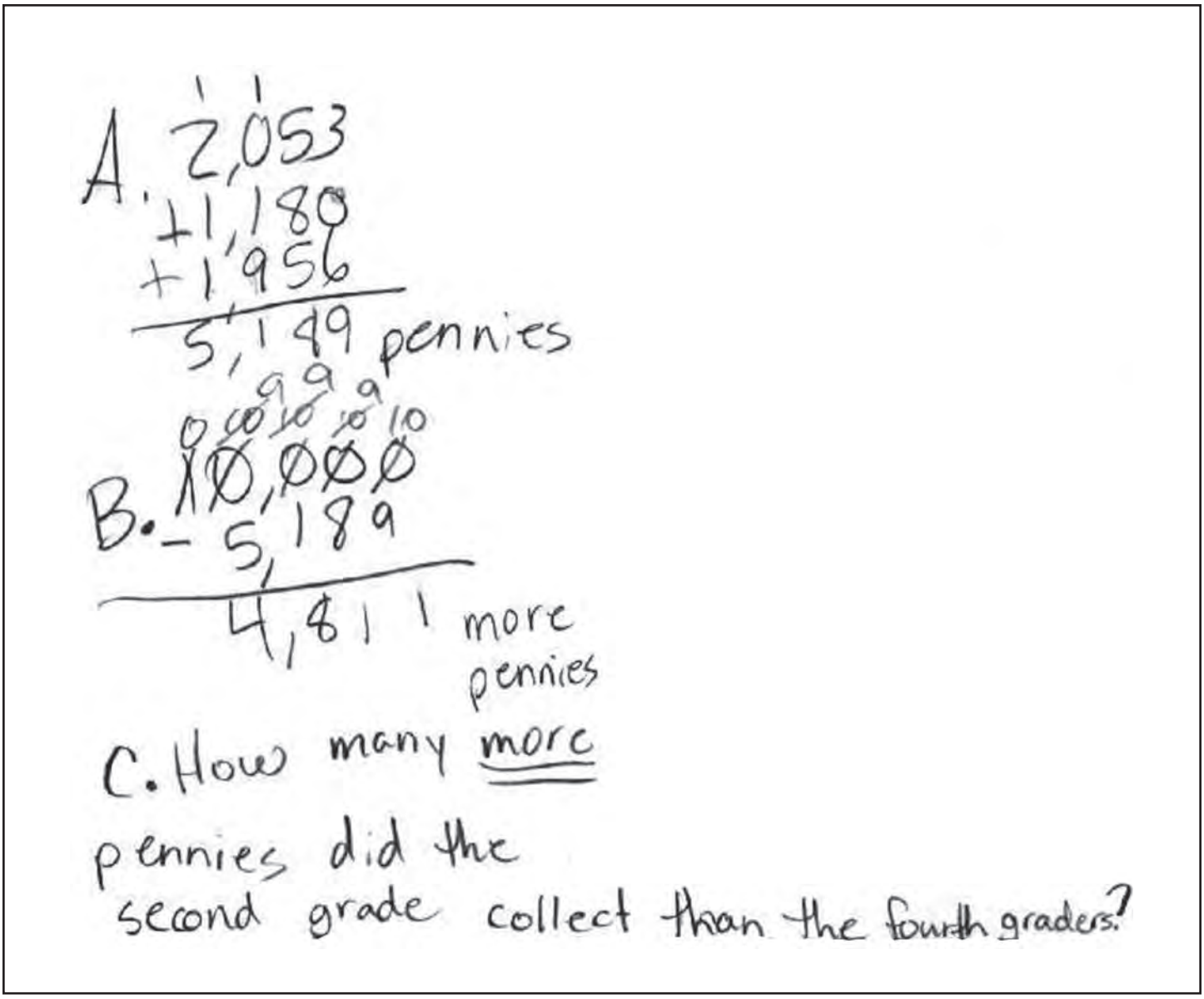
How many fewer pennies did the fourth grade collect than the second grade?

Example of Scor e Point 4

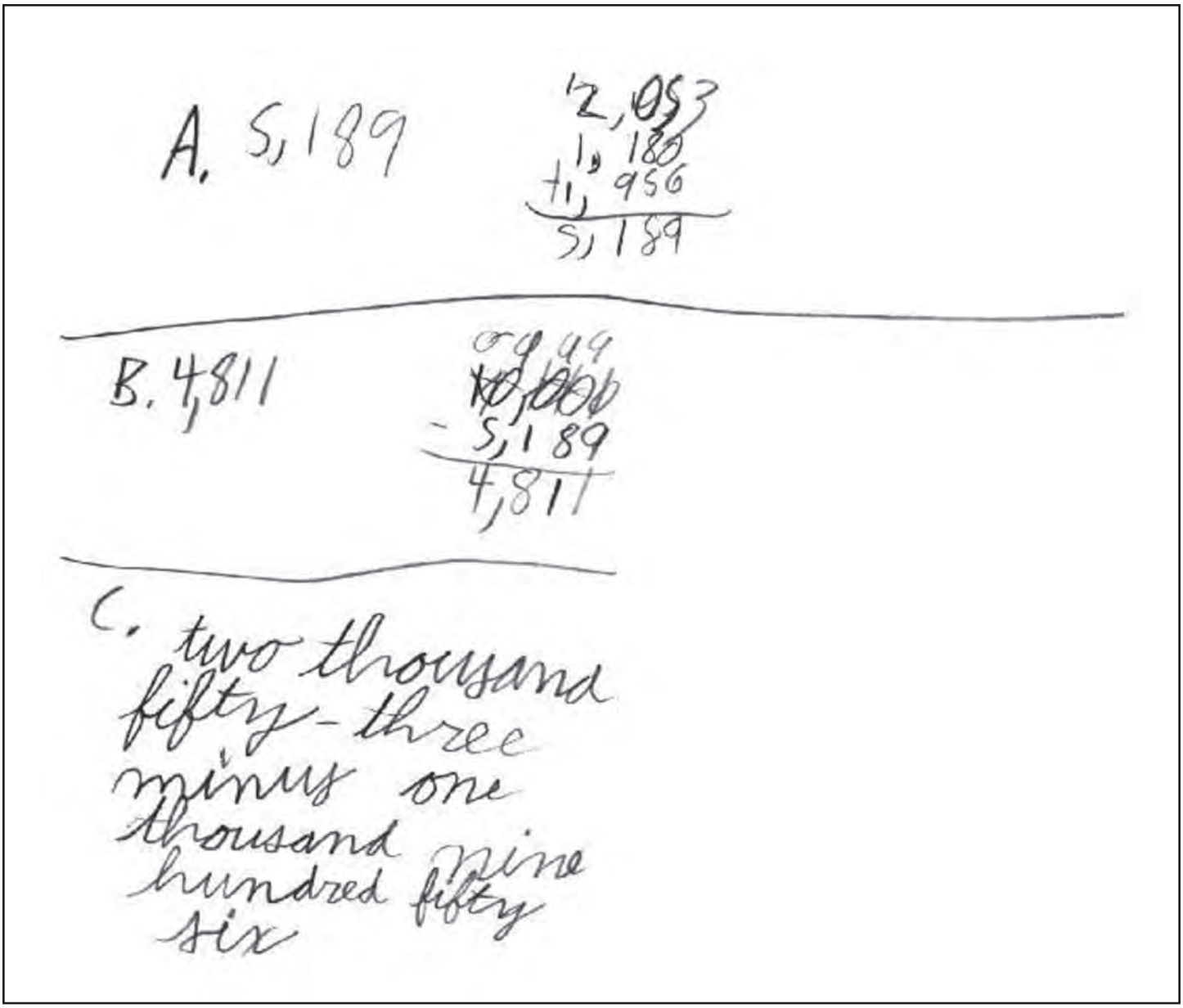
Sample 1



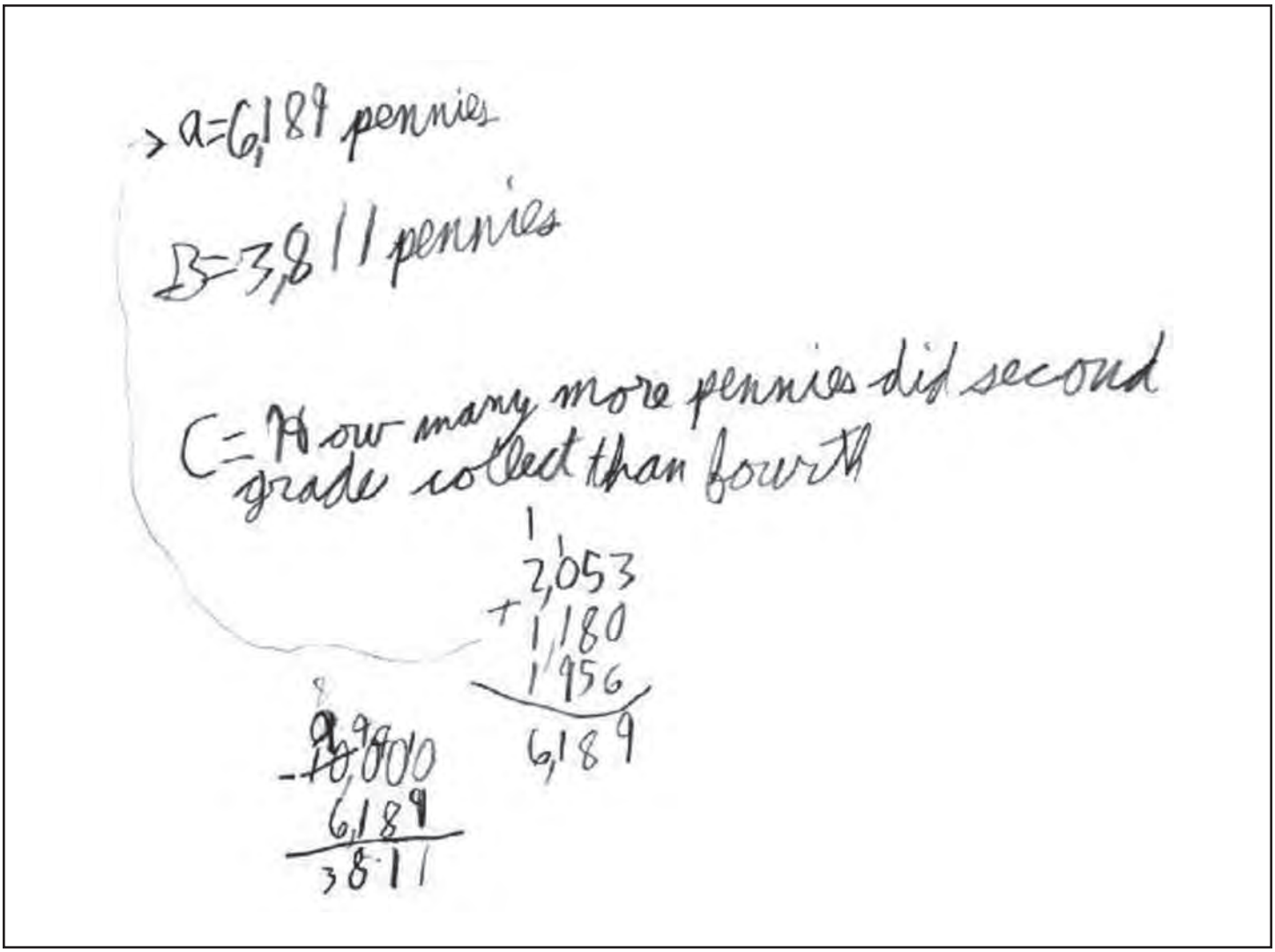
Example of Scor e Point 4
Sample 2



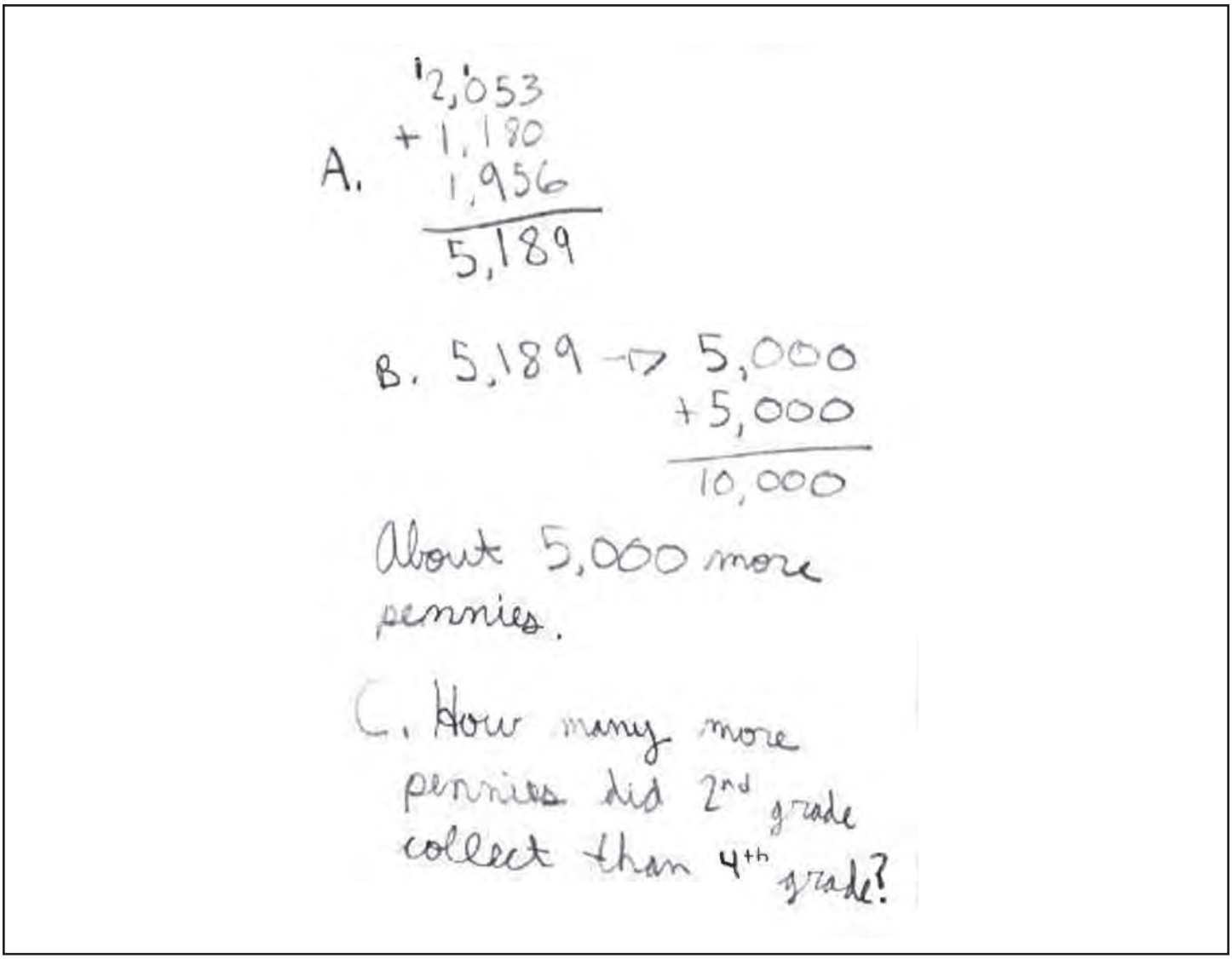
Example of Scor e Point 3
Sample 1



Example of Scor e Point 3
Sample 2

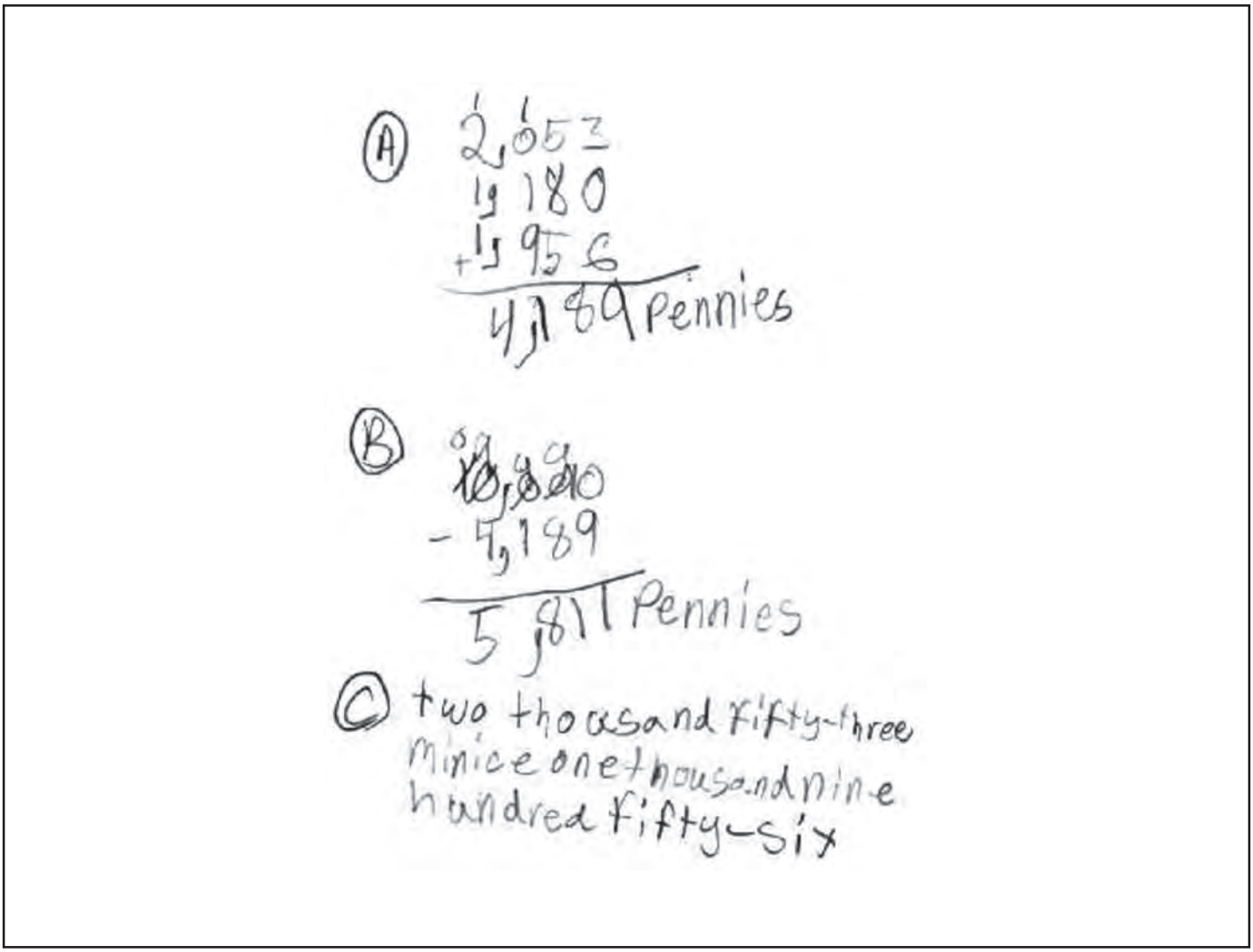


Example of Scor e Point 2
Sample 1

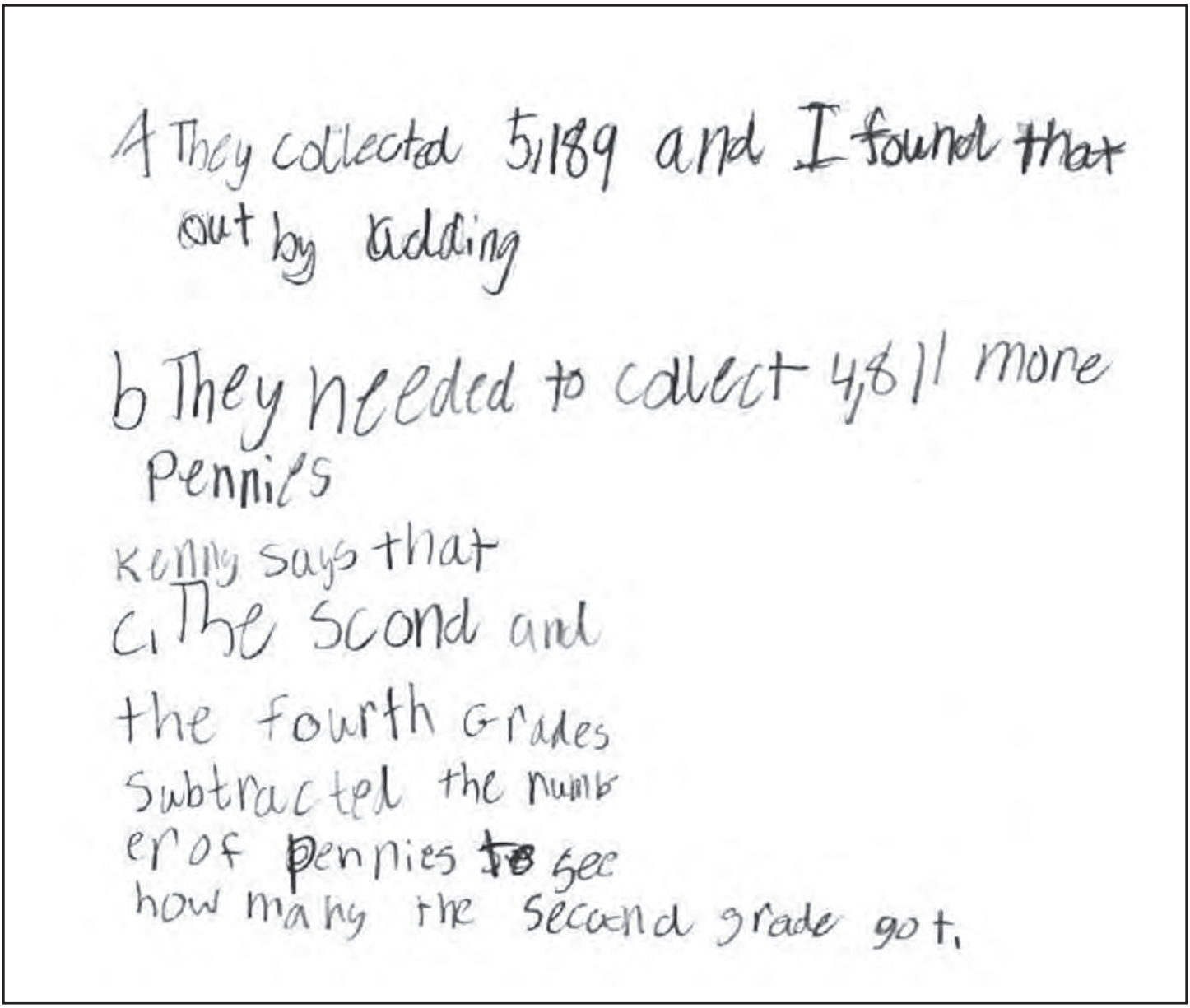


Example of Scor e Point 2

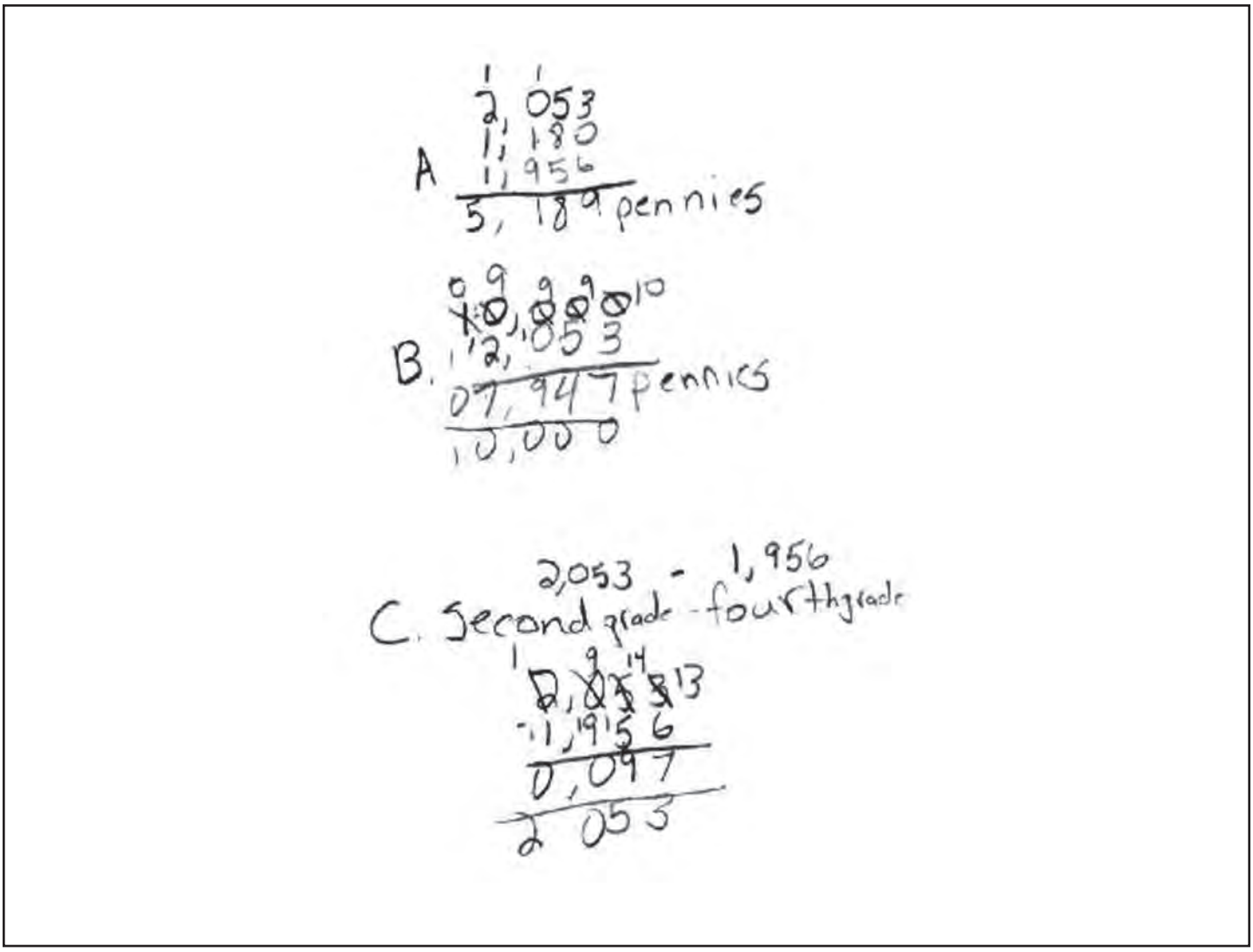
Sample 2



Example of Scor e Point 1
Sample 1



Example of Scor e Point 1
Sample 2



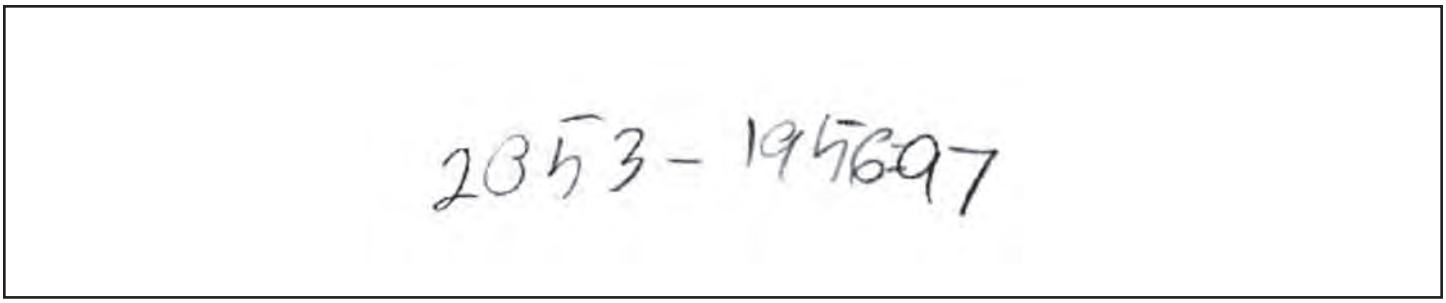
Example of Scor e Point 0
Sample 1

a.) 1,180 because If you look over at 3rd grade It has 1,180.

B.) 9,000 pennies you add 1,180 to 10,000 and you get 9,000.

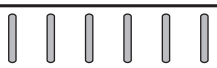
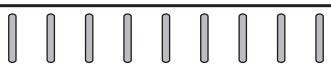
C.) 2,053 - 1,954 = 1,956

Example of Scor e Point 0
Sample 2



12. Tyler made the picto graph belo w to sho w the total number of craft sticks he used to mak e different numbers of bo xes.

Tyler's Boxes

Number of Boxes	Total Number of Craft Sticks
1	
2	
3	

Key
stands for 10 craft sticks

Which char t sho ws the same infor mation?

A.

Tyler's Boxes

Number of Boxes	Total Number of Craft Sticks
1	10
2	10
3	10

B.

Tyler's Boxes

Number of Boxes	Total Number of Craft Sticks
1	3
2	6
3	9

C.

Tyler's Boxes

Number of Boxes	Total Number of Craft Sticks
1	30
2	30
3	30

D.

Tyler's Boxes

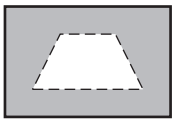
Number of Boxes	Total Number of Craft Sticks
1	30
2	60
3	90

13. The population of Billings, Montana, in 2006 w as 100,148. What is 100,148 rounded to the nearest hundred?

A. 101,000
B. 100,200
C. 100,100
D. 100,000

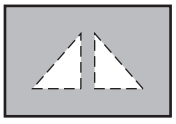
14. Kara folded a piece of paper in half and cut the folded paper on the dotted lines, as shown below.

What did the piece of paper look lik e when Kara unfolded it?

A. 

B. 

C. 

D. 

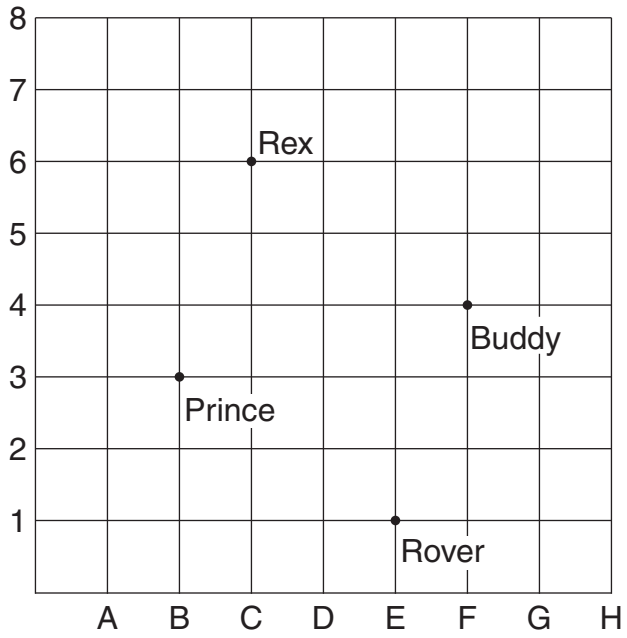
15. Bryce wrote the number sentence belo w.

$$3 \times 4 \times 2 = \square \times 2 \times 3$$

What number mak es this number sentence tr ue?

A. 4
B. 6
C. 12
D. 24

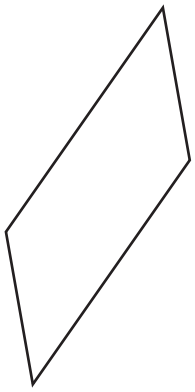
16. Curtis made the g rid belo w to sho w w here four do gs li ve in his neighborhood.



What ordered pair sho ws w here Buddy lives?

A. (F, 3)
B. (F, 4)
C. (G, 3)
D. (G, 4)

17. Look at the shape belo w.

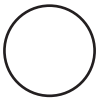


What is the shape?

A. a he xagon
B. a parallelo gram
C. a rectangle
D. a rhombus

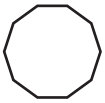
18. The shapes belo w follo w a patter n.

What is the ne xt shape in the patter n?

A. 

B. 

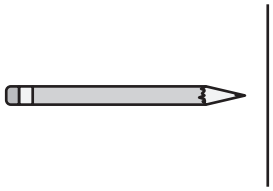
C. 

D. 

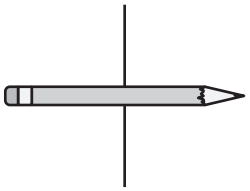
19. Divide:

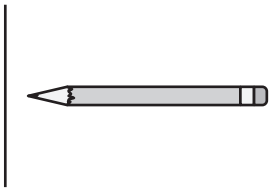
$572 \div 4 =$

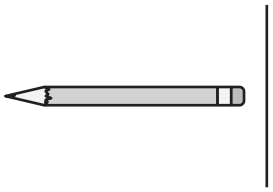
20. Abby put a pencil next to a line, as shown below.

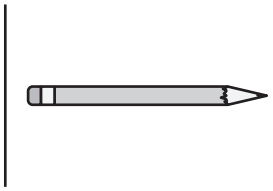


Abby flipped the pencil over the line. What does the pencil look like now?

A.


B.


C.


D.


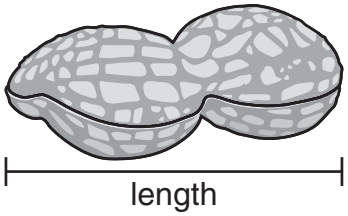
21. The numbers below follow a pattern.

12, 22, 20, 30, 28, 38, 36, ?, 44, 54

What number is missing from the pattern?

A. 26
B. 34
C. 40
D. 46

22. Use your ruler and the picture below to answer this question.



What is the length of this peanut to the nearest one-fourth inch?

A. inches

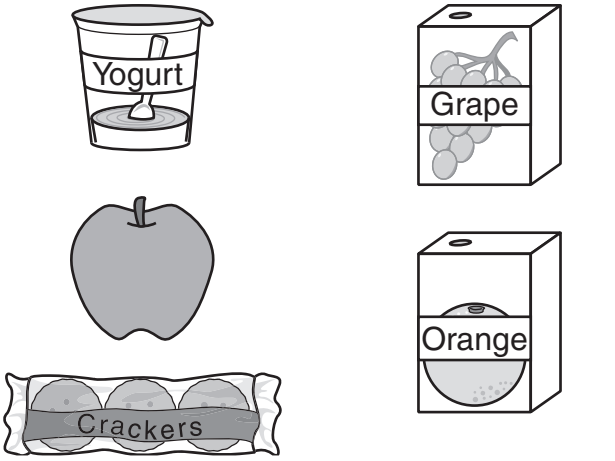
B. inches

C. inches

D. 2 inches

23. Walter is picking from the snacks and juice boxes shown below.

Snacks **Juice Boxes**



How many different ways can Walter choose one snack and one juice box?

A. 2
B. 3
C. 5
D. 6

24. The pictograph below shows the number of different color T-shirts a school store sold last week.

T-Shirts Sold Last Week

Color	Number of T-Shirts
Blue	
Green	
Red	
Yellow	

Key
stands for 5 T-shirts

Which question can be answered using the information in the pictograph?

A. How many students bought T-shirts at the school store on Monday?
B. How many more green T-shirts than red T-shirts did the school store sell last week?
C. How many T-shirts does the school store have to sell?
D. How many purple T-shirts did the school store sell last week?

25. Henry bought 80 ounces of chocolate chips to make cookies. How many pounds of chocolate chips did he buy?

A. 3
B. 5
C. 6
D. 8

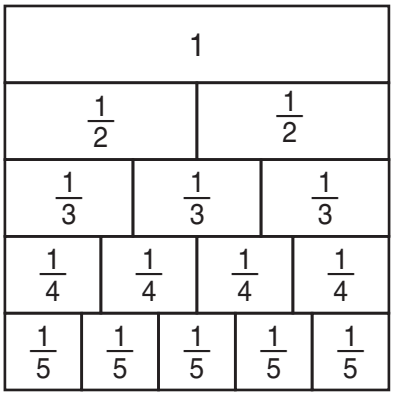
26. Each △ stands for the same number in the number sentences below.

$$\triangle + 8 = 10$$
$$\bigcirc \times \triangle = 14$$

What number does the ○ stand for?

A. 2
B. 7
C. 16
D. 28

27. You may use the model below to help you answer this question.



Which list of fractions is in order from **least** to **greatest**?

A. $\frac{2}{5}, \frac{3}{4}, \frac{1}{2}$

B. $\frac{1}{2}, \frac{2}{5}, \frac{3}{4}$

C. $\frac{2}{5}, \frac{1}{2}, \frac{3}{4}$

D. $\frac{1}{2}, \frac{3}{4}, \frac{2}{5}$

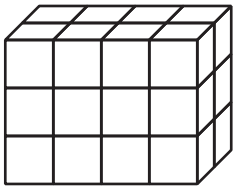
28. Look at the number sentence belo w.

$$\square \div 7 = 3$$

What number belongs in the bo x?

A. 4
B. 10
C. 18
D. 21

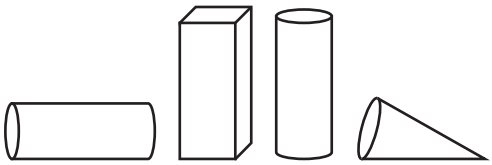
29. George used cubes to mak e the prism shown belo w.



How man y cubes did Geor ge use to mak e this prism?

A. 12
B. 18
C. 24
D. 26

30. Terrell put the solid shapes sho wn belo w on his desk.



How man y c ylinders did Terrell put on his desk?

A. 1
B. 2
C. 3
D. 4

Science Directions for Spring CRT

This Science test contains three test sessions. Mark or write y our ans wers in the Answer Booklet. Use a pencil to mark or write y our ans wers.

This test includes tw o types of questions: multiple-choice and constr ucted-response questions.

For the multiple-choice questions, y ou will be gi ven four ans wer choices—A, B , C, and D . You are to choose the cor rect ans wer from the four choices. Each question has onl y one ans wer. After y ou have chosen the cor rect ans wer to a question, fi nd the question number in y our Answer Booklet and completel y fi ll in the circle for the ans wer y ou chose. Be sure the question number in the Answer Booklet matches the question number in the Test Booklet. The e xample belo w sho ws ho w to completely fi ll in the circle.

CORRECT MARK	INCORRECT MARKS
●	❍ ⊙ ◘ ⊘

If y ou decide to change y our ans wer to a question, erase the wrong mark completel y before fi lling in the circle of the ne w ans wer. Be sure y ou ha ve onl y one ans wer mark ed for each question. **If tw o circles ar e b ubbled in f or the same question, that question will be scor ed as incorr ect.**

If y ou are ha ving diffi culty ans wering a question, skip the question and come back to it later . Mak e sure y ou skip the circle for the question in y our Answer Booklet.

For the other types of questions in the Test Booklet, y ou will be ask ed to write y our ans wers in the box pro vided. Read the question carefull y. If a question asks y ou to e xplain y our ans wer or to sho w your w ork, be sure to do so.

You ma y mak e notes or use highlighters in y our Test Booklet, but y ou must bubb le or write y our fi nal answers in y our Answer Booklet. **Do not mak e an y str ay or unnecessary mar ks in y our Answer Booklet.**

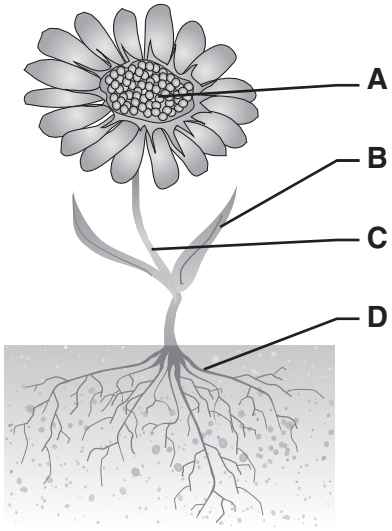
Let's w ork through a sample question to gether to be sure y ou understand the directions.

Sample Question

1. What is the capital of Montana?
   A. Browning
   B. Glendive
   C. Helena
   D. Missoula

Science

1. Look at the dra wing belo w.



Which par t of this plant is used for reproduction?

A. part A
B. part B
C. part C
D. part D

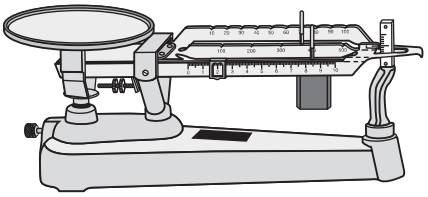
2. Winnie is stretching a r ubber band o ver a doorknob . She plucks the r ubber band and it mak es a sound. Winnie k eeps stretching and plucking the r ubber band, making it vibrate f aster and f aster. What is happening to the pitch of the sound?

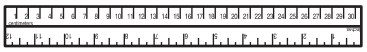
A. It is getting higher .
B. It is getting lo wer.
C. It is sta ying the same.
D. It is going up and do wn.

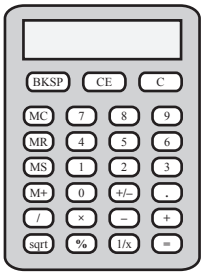
3. A student doing a scientifi c investigation could **best** ans wer w hich question?

A. When will a v olcanic er uption occur?
B. What will the w eather be lik e next week?
C. Where is the air temperature w armest in the classroom?
D. Where will the ne xt ear thquake occur?

4. Which tool would be **most** useful to measure the mass, in grams, of a rock?

A. 

B. 

C. 

D. 

5. Science has helped people to better understand the world. Which statement is the **best** example of this?

A. Moisture, temperature, and wind speed can be measured to predict weather.

B. The movement of stars and planets can be used to predict a person's future.

C. There are many different opinions about how the universe was formed.

D. Some ancient people believed the universe was formed by separating matter into two groups.

6. Look at the tab le belo w.

Observations of Squirrel Behavior

Date	Squirrels Observed Gathering or Eating Nuts
Oct. 9	33%
Oct. 17	38%
Oct. 28	50%
Nov. 3	64%

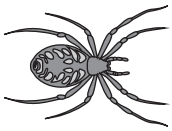
Which conclusion should be made from these data?

A. More squir rels spent time gathering food as it got closer to winter .
B. Squirrels spent more than half their day gathering food b y No vember.
C. Squirrels gathered much more food than the y ate each da y.
D. Squirrels could not sur vive the winter unless the y gathered food.

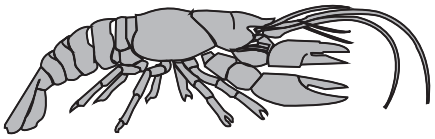
7. Jill has a pet do g named Biscuit. Which of Biscuit's traits is lear ned rather than inherited?

A. Biscuit is male.
B. Biscuit is w hite and tan.
C. Biscuit has a shor t tail.
D. Biscuit can roll o ver.

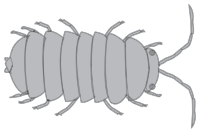
8. The pictures belo w sho w a g roup of organisms.



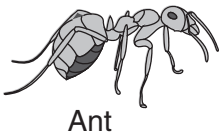
Spider



Crayfish



Pill Bug



Ant

These or ganisms are all placed in the same lar ge g roup because the y share which characteristic?

A. They ha ve antennae.
B. They ha ve six le gs.
C. They ha ve se gmented bodies.
D. They ha ve a soft outer skin.

9. Students in a science class w ent outside to collect insects. When the students come inside, w hat is the **best** w ay for them to observe details of the insects' bodies?

A. taking photo graphs of the insects
B. viewing the insects through binoculars
C. using hand lenses to magnify the insects
D. looking at the insects with their e yes

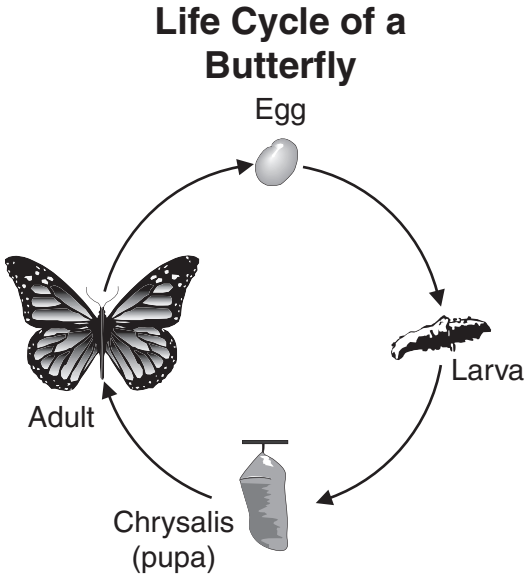
10. Butterflies, mosquitoes, and flies undergo a complete metamorphosis during their development. Draw and label the life cycle of a butterfly, mosquito, or fly.

Scoring Guide

Score	Description
4	Student demonstrates a thorough understanding of the life cycles and development of familiar organisms. Response provides a labeled drawing of the life cycle of the mosquito, fly, or butterfly, including all four stages in the correct relative order (using arrows or numbers). Response contains no errors.
3	Student demonstrates a general understanding of the life cycles and development of familiar organisms. Response provides a labeled drawing with three stages of the life cycle of the mosquito, fly, or butterfly in the correct relative order. Response contains an error or omission.
2	Student demonstrates a limited understanding of the life cycles and development of familiar organisms. Response provides a labeled drawing with two stages of the life cycle of the mosquito, fly, or butterfly or response provides a list of all four stages of complete metamorphosis. Response contains errors or omissions.
1	Student demonstrates little understanding of the life cycles and development of familiar organisms. Response gives one stage of the life cycle of the mosquito, fly, or butterfly. Response is minimal.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Scoring Notes

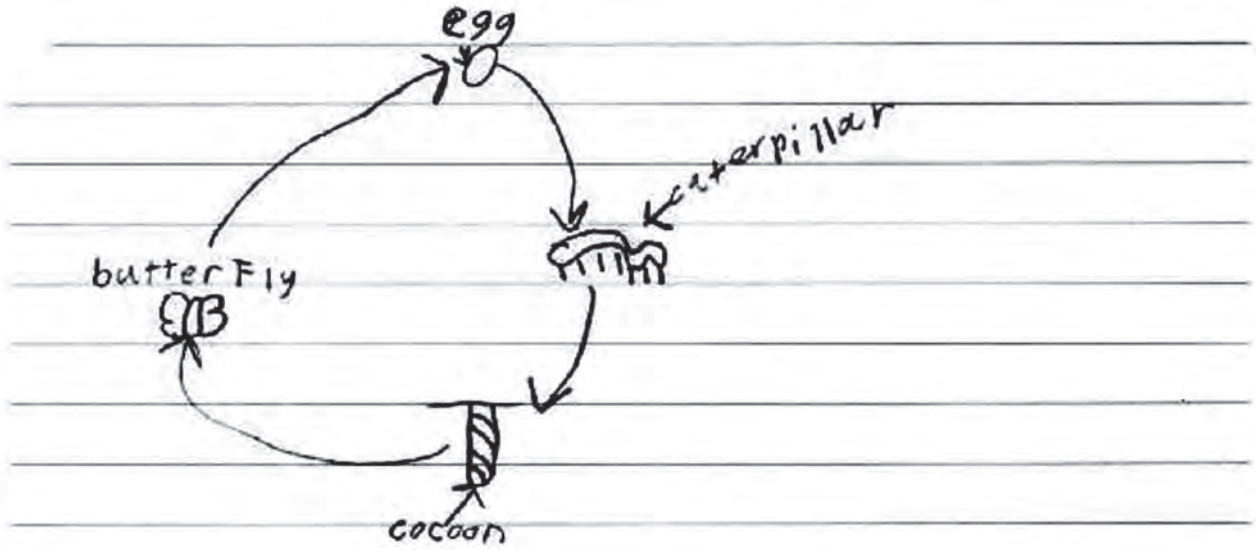
The life cycles of insects undergoing a complete metamorphosis have four stages—egg, larva, pupa, adult. The butterfly life cycle is shown below.



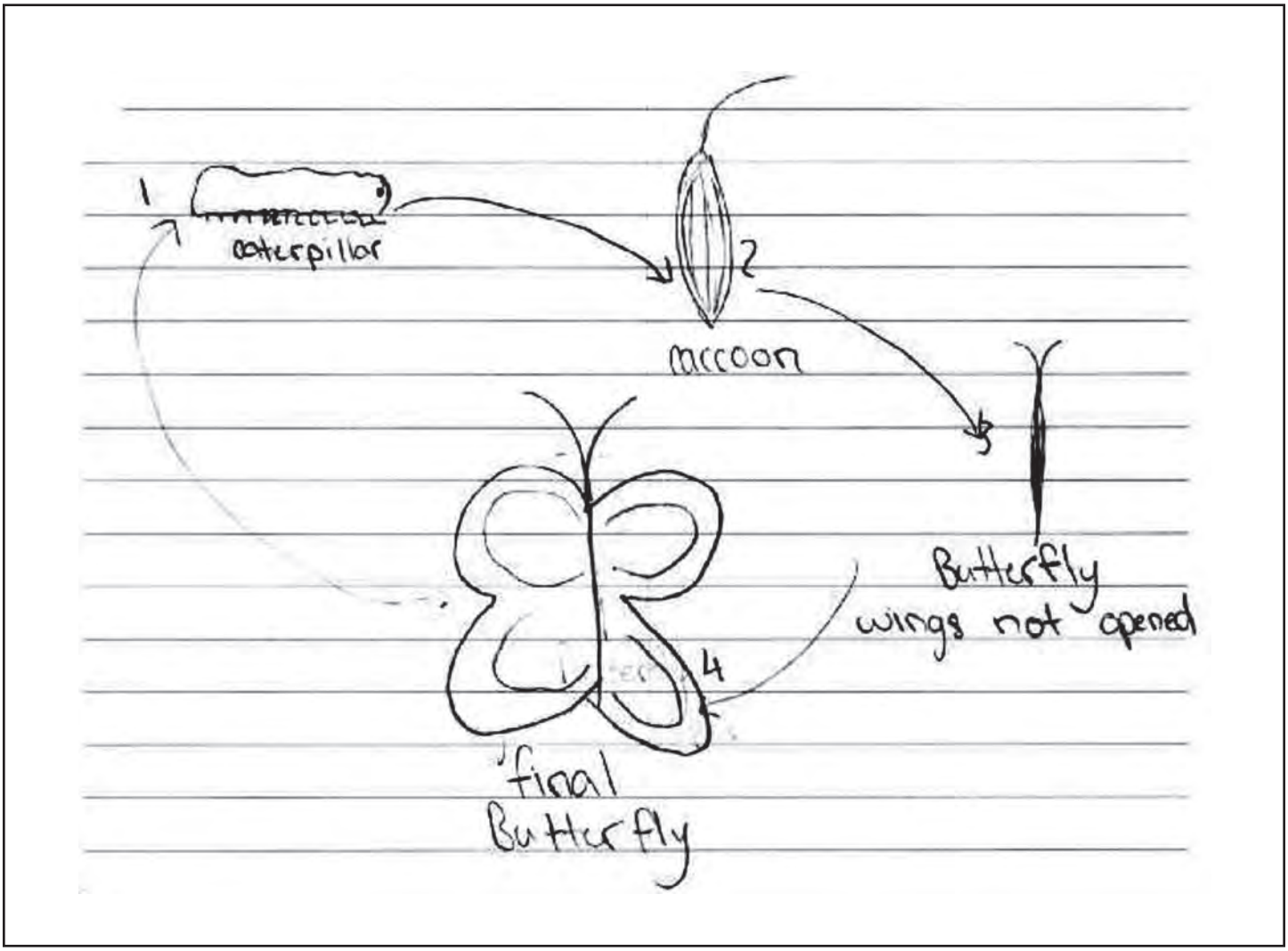
Special Notes:

a. Students do not ha ve to accuratel y represent detailed features of the lar va or pupa. Implied order is okay.
b. Simply dra wing a picture of a butterfl y, mosquito, or fl y equals "zero points" unless the stage of life cycle is clearl y labeled or infer red in the dra wing.

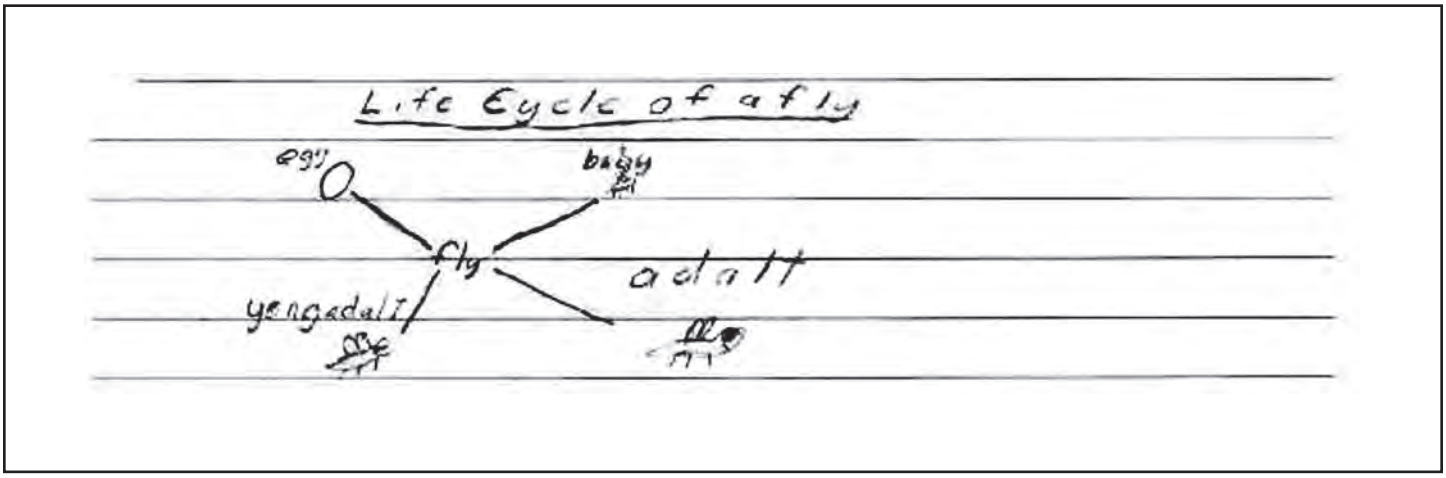
Example of Scor e Point 4



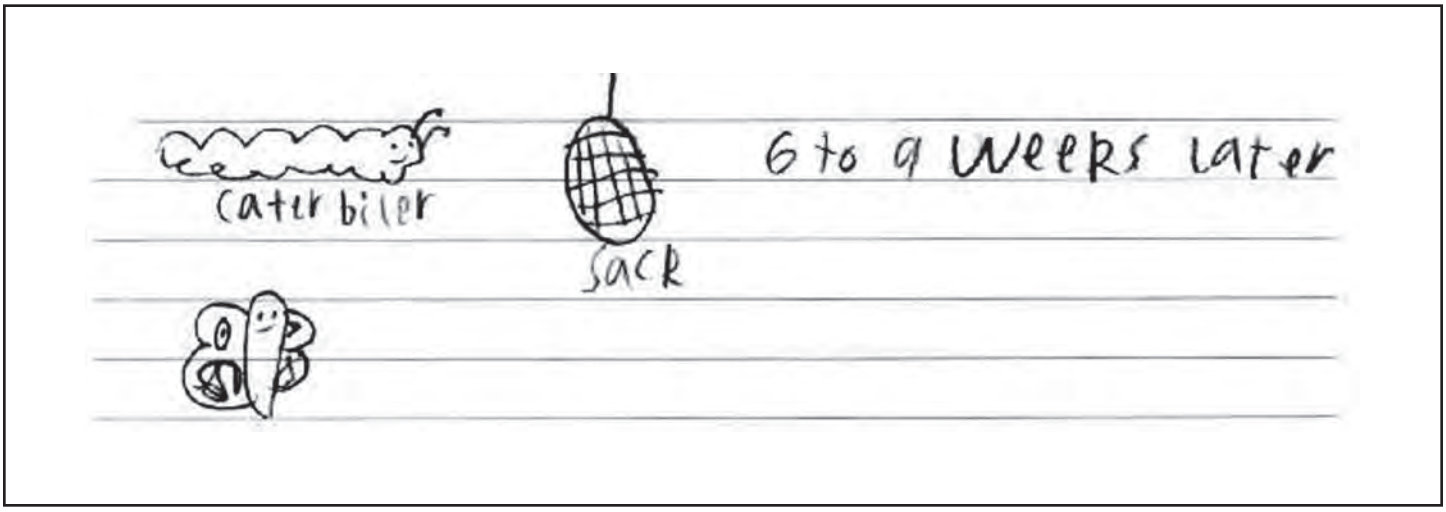
Example of Scor e Point 3



Example of Scor e Point 2



Example of Scor e Point 1



Example of Scor e Point 0

The label of life cycle is that The mosquito eats the fly and the Butterfly eats the mosquito and the fly Because the Butterfly Want's to get the fly but the fly undergraws and it is in the mosquito witch the Butterfly eats the mosquito to not just the fly and that is the cycle of life called mosquito, Butterfly, and fly.

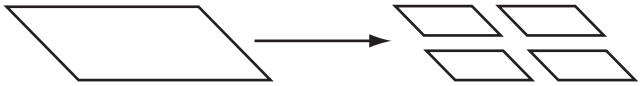
11. Which material can be placed in a space in an electric circuit and the lightbulb will shine?

A. paper
B. penny
C. wooden block
D. yarn

12. Which action will change the physical properties of a candy bar?

A. wrapping the candy bar in paper
B. placing the candy bar on a shelf
C. saving the candy bar for lunch
D. cutting the candy bar in half

13. A piece of paper has a mass of 20 grams. It is cut into four equal pieces, as shown below.



20 grams

What do the four pieces of paper weigh altogether?

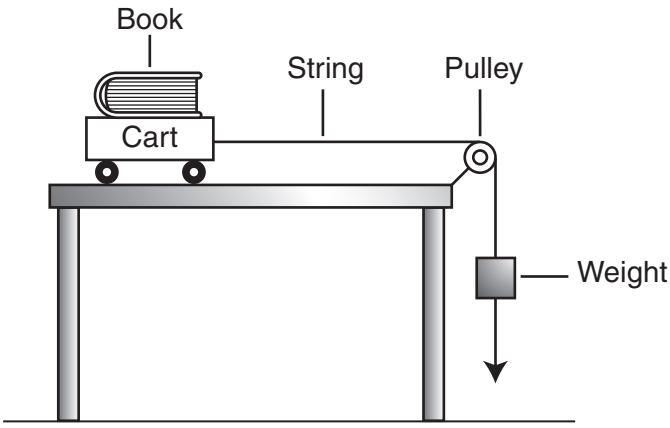
A. 4 grams
B. 5 grams
C. 20 grams
D. 80 grams

14. Joe is testing different-colored cans to see which one absorbs the most heat. He finds four identical cans and paints each one a different color. He puts water and a thermometer in each can. Then he places the cans on a shelf in the Sun at noon.

Which variable should Joe control?

A. the number of cans
B. the size of the thermometers
C. the amount of water in each can
D. the order of the cans in the Sun

15. Carl is doing an in vestigation using a book, a car t, a string, a pulle y, and a weight, as sho wn belo w.



When he puts one book on the car t and lets the w eight f all to the fl oor, the car t moves quickl y to the right side of the table. What will happen if Carl repeats this investigation with TWO books on the car t?

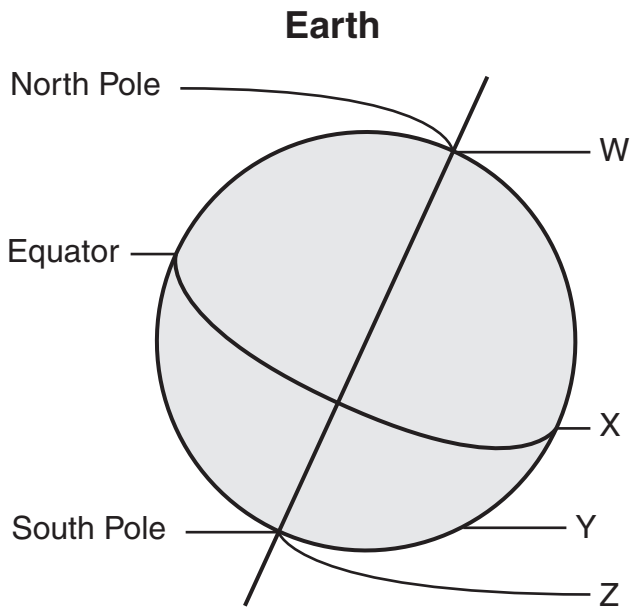
A. The car t will mo ve more quickl y to the right side of the tab le.
B. The car t will mo ve more slo wly to the right side of the tab le.
C. The car t will mo ve slo wly to the left side of the tab le.
D. The car t will mo ve quickl y to the left side of the tab le.

16. The picture belo w sho ws two bar magnets.

If these magnets are placed end to end , which ends will attract each other?

A. the two nor th ends
B. the two south ends
C. a south and a nor th end
D. the ends that are made of iron

17. The letters W, X, Y, and Z in the picture below show four places on Earth.



Which place is **most likely** to have a warm climate with lots of rain year-round?

A. W
B. X
C. Y
D. Z

18. Which is an example of how workers at a car manufacturing plant use science and technology?

A. deciding what to name a car
B. choosing the color of a car
C. pricing a car so people will buy it
D. making a car that uses less gasoline

19. Which resource allows scientists to share their ideas and problems with other scientists around the world in just minutes?

A. a book
B. the Internet
C. a magazine
D. a newspaper

20. How do scientists and doctors use the process of scientific inquiry to help people with diseases?

A. They only use medications that have been used for a long time to treat diseases.
B. They test and make new medicines that could treat different diseases.
C. They treat people with substances that look like they might work.
D. They ask people with diseases to come up with their own treatments.

21. Which example describes an instinct that will help an animal live through the winter?

A. a snowshoe hare changing fur color for winter

B. a dog lying by a warm fireplace

C. a monarch butterfly migrating to Mexico

D. a deer growing thicker and longer antlers

22. A student sprouted lettuce seeds under different colors of light and under no light. The results from this experiment are shown below.

Sprouting

Color of Light	Number of Seeds That Sprouted	Number of Seeds That Did Not Sprout
No light	26	74
Blue	25	75
Green	21	79
Red	71	29
Far-red	16	84

Based on this experiment, which color of light should be used to help lettuce seeds sprout?

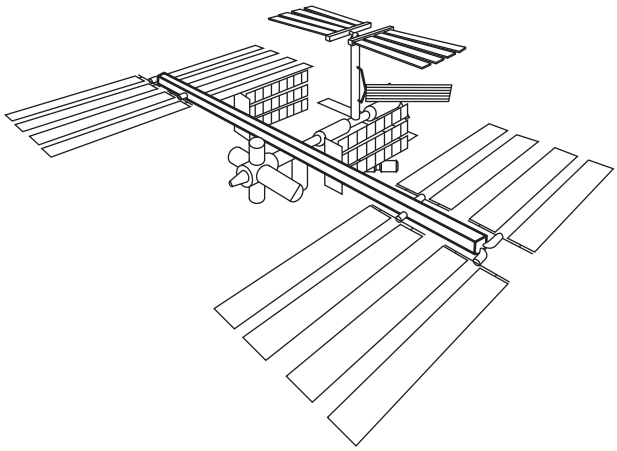
A. blue

B. green

C. red

D. far-red

23. The picture below shows the International Space Station.



Why was the space station built?

A. to help people study the science of space

B. to see how people live on Earth

C. to give astronauts a place to rest on their trips to space

D. to send and relay telephone messages

24. Which set of items lets some light pass through?

A. paper clip, lamp shade, aluminum foil

B. paper clip, aluminum foil, tissue paper

C. lamp shade, fog, aluminum foil

D. tissue paper, lamp shade, fog

25. A student tested some physical properties of items found in the classroom. Then she tested a mystery item. The table below shows her results.

Physical Properties

Item	Strength	Magnetism	Flexibility
Plastic cup	+++	No	++
Rubber band	+++	No	++++
Paper clip	++++	Yes	+
Sheet of paper	++	No	+++
Mystery item	+++	No	++++

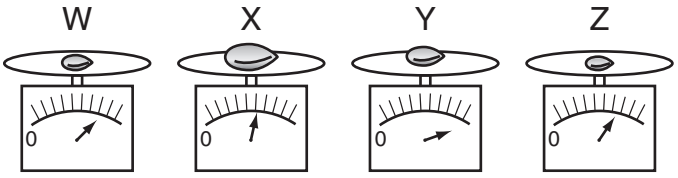
Key

\+ represents more strength in that area

Which item is **most** similar to the mystery item?

A. plastic cup
B. rubber band
C. paper clip
D. sheet of paper

26. The pictures below show four different seeds being weighed on the same scale.



Which seed weighs the most?

A. seed W
B. seed X
C. seed Y
D. seed Z

27. A student wants to see if she runs faster in new shoes than she does in old shoes. How can she **best** compare her speeds in the new and the old shoes?

A. by racing another student who is wearing the old shoes
B. by comparing the time it takes her to run a kilometer in each pair of shoes
C. by recording the time it takes her to run as far as she can in the new shoes
D. by reading a book about how fast students can run wearing different types of shoes

28. A student wants to know how much food a beagle eats in a week. The table below shows the information she could find.

Food and Weight

Kind of Dog	Weight (kg)	Amount Eaten Per Week (kg)
Dachshund	4.5	1.4
Beagle	11.5	?
Retriever	18.1	5.9
German shepherd	24.9	7.9

The amount of food a dog eats is related to the weight of the dog. According to the table, how much food would a beagle eat per week?

A. 1.6 kg
B. 3.6 kg
C. 5.7 kg
D. 8.6 kg

Acknowledgments

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